

20.(amended) An isolated polypeptide encoded by the isolated nucleic acid molecule of claim 1[, 2, 3, 4, 5 or 6].

29.(amended) An isolated polypeptide which selectively binds a protein encoded by the isolated nucleic acid molecule of claim 1[, 2, 3, 4, 5 or 6].

33.(amended) A kit for detecting the presence of the expression of a tumor associated polypeptide precursor comprising a pair of isolated nucleic acid molecules each of which consists [essentially] of a molecule selected from the group consisting of (a) a 12-32 nucleotide contiguous segment of nucleotides 1-993 of SEQ ID NO:4, (b) a 12-32 nucleotide contiguous segment of nucleotides 1-746 of SEQ ID NO:6, (c) complements of "(a)", and (d) complements of "(b)", wherein the contiguous segments are nonoverlapping.

43.(amended) A method for treating a subject with a disorder characterized by expression of a LAGE-1 tumor associated polypeptide, comprising

administering to the subject an amount of an agent which enriches selectively in the subject the presence of complexes of a HLA molecule and a tumor rejection antigen derived from [a] the LAGE-1 tumor associated polypeptide of any of claims 20, 22, 24 or 26, or an immunogenic fragment thereof [coded for by a nucleic acid molecule as described in claims 1, 2, 3, 4, 5, or 6], sufficient to ameliorate the disorder.

45.(amended) A method for treating a subject with a disorder characterized by expression of a LAGE-1 nucleic acid molecule or an expression product thereof, comprising:

administering to the subject an amount of autologous cytolytic T cells sufficient to ameliorate the disorder, wherein the cytolytic T cells are specific for complexes of an HLA molecule and [a] the LAGE-1 tumor associated polypeptide of any of claims 20, 22, 24 or 26, or an immunogenic fragment thereof.

47.(amended) A method for treating a subject with a disorder characterized by expression of a LAGE-1 nucleic acid molecule or an expression product thereof, comprising:

administering to the subject an amount of [a] the LAGE-1 tumor associated polypeptide of any of claims 20, 22, 24 or 26, or an immunogenic fragment thereof sufficient to ameliorate the disorder.

49.(amended) A method for enriching selectively a population of T cells with cytolytic T cells specific for a LAGE-1 tumor associated polypeptide comprising:

contacting an isolated population of T cells with an agent presenting a complex of [a] the LAGE tumor associated polypeptide of any of claims 20, 22, 24 or 26, or an immunogenic fragment thereof and a HLA presenting molecule in an amount sufficient to selectively enrich the isolated population of T cells with the cytolytic T cells.

53.(amended) A vaccine composition comprising [a] the nucleic acid of claim 1 encoding LAGE-1 or an immunogenic fragment thereof.

54.(amended) A vaccine composition comprising [a] the LAGE-1 polypeptide of claim 20 or an immunogenic fragment thereof.

55.(amended) A vaccine composition comprising a cell which expresses [a] the LAGE-1 [nucleic acid or] polypeptide of claim 20, or an immunogenic fragment thereof.

56.(amended) An isolated nucleic acid molecule which encodes the polypeptide of [any of] claim[s] 22[-25] or claim 24.